IJ,

 15

20

25

WHAT IS CLAIMED IS:

1. A silver halide photographic lightsensitive material comprising a support having thereon at least one lightsensitive silver halide emulsion layer, wherein the lightsensitive material contains at least one compound represented by general formula (I) and at least one photographically useful group-releasing compound represented by general formula (II) or (III) that is capable of forming a compound having substantially no contribution to a dye after its coupling with an oxidized form of a developing agent:

$$(X) k-(L) m-(A-B) n$$
 (I)

wherein X represents an adsorbing group to silver halide or a light-absorbing group having at least one atom selected from the group consisting of N, S, P, Se and Te; L represents a bivalent linking group having at least one atom selected from the group consisting of C, N, S and O; A represents an electron-donating group; B represents a leaving group or a hydrogen atom, wherein after -(A-B)_n portion is oxidized, B is eliminated or deprotonated thereby to form a radical A·; k and m independently represent an integer of O to 3; and n represents 1 or 2;

wherein COUP1 represents a coupler residue capable of releasing D1 by a coupling reaction with an oxidized form of a developing agent, along with forming a water-

[]

Ü

10

15

20

25

soluble or alkali-soluble compound; and D1 represents a photographically useful group or its precursor which is bonded to the coupling position of COUP1;

COUP2-C-E-D2

(III)

wherein COUP2 represents a coupler residue capable of coupling with an oxidized form of a developing agent; E represents an electrophilic portion; C represents a single bond or a bivalent linking group capable of releasing D2, along with a 4- to 8-membered ring formation, through an intramolecular nucleophilic substitution reaction between the electrophilic portion E and a nitrogen atom, wherein the nitrogen atom originates from the developing agent and is boned to the coupling position in a coupling product between COUP2 and the oxidized form of the developing agent, and wherein C may be bonded to COUP2 at the coupling position of COUP2 or may be bonded to COUP2 at a position other than the coupling position of COUP2; and D2 represents a photographically useful group or its precursor.

- 2. The silver halide photographic lightsensitive material according to claim 1, wherein 50% or more of the total projected area of all the silver halide grains contained in the lightsensitive layer is occupied by silver halide grains satisfying the following requirements (a) to (d):
 - (a) paralitel main planes thereof are (111) faces,

20

25.

(b) an aspect ratio thereof is 2 or more,

- (c) ten or more dislocation lines per grain are present, and
- (d) tabular silver halide grains each formed of silver iodopromide or silver chloroiodobromide whose silver chloride content is less than 10 mol%
- 3. The silver halide photographic lightsensitive material according to claim 1, wherein 50% or more of the total projected area of all the silver halide grains contained in the lightsensitive layer is occupied by silver halide grains satisfying the following requirements (a), (d) and (e):
 - (a) parallel main planes thereof are (111) faces,
- (d) tabular silver halide grains each formed of silver iodobromide or silver chloroiodobromide whose silver chloride content is less than 10 mol%, and
- (e) hexagonal tabular grains each having at least one epitaxial junction per grain at an apex portion and/or a side face portion and/or a main plane portion thereof
 - 4. The silver halide photographic lightsensitive material according to claim 1, wherein 50% or more of the total projected area of all the silver halide grains contained in the lightsensitive layer is occupied by silver halide grains satisfying the following requirements (d), (f) and (g):
 - (d) tabular silver halide grains each formed of

The street printed that the street printed the stre

10

5

•

15

20

25

silver iodobromide or silver chloroiodobromide whose silver chloride content is less than 10 mol%,

- (f) parallel main planes thereof are (100) faces, and
 - (g) an aspect ratio thereof is 2 or more
- 5. The silver halide photographic lightsensitive material according to claim 1, wherein 50% or more of the total projected area of all the silver halide grains contained in the lightsensitive layer is occupied by silver halide grains satisfying the following requirements (g), (h) and (i):
 - (g) an aspect ratio thereof is 2 or more,
- (h) parallel main planes thereof are (111) faces or (100) faces, and
- (i) tabular grains each having a silver chloride content of at least 80 mol%
- 6. A silver halide photographic lightsensitive material comprising a support having thereon at least one lightsensitive silver halide emulsion layer containing an emulsified dispersion, wherein the lightsensitive material contains at least one compound represented by general formula (I), and at least one surfactant having a critical micelle concentration of 4.0×10^{-3} mol/L or less in an amount of 0.01% by weight or more based on all the ingredients contained in the lightsensitive layer:

$$(X) k-(L) m-(A-B) n$$
 (I)

wherein X represents an adsorbing group to silver halide or a light-absorbing group having at least one atom selected from the group consisting of N, S, P, Se and Te; L represents a bivalent linking group having at least one atom selected from the group consisting of C, N, S and O; A represents an electron-donating group; B represents a leaving group or a hydrogen atom, wherein after -(A-B)_n portion is oxidized, B is eliminated or deprotonated thereby to form a radical A·; k and m independently represent an integer of O to 3; and n represents 1 or 2.

7. The silver halide photographic lightsensitive material according to claim 2, wherein 50% or more of the total projected area of all the silver halide grains contained in the lightsensitive layer is occupied by silver halide grains satisfying the following requirements (a) to (d):

- (a) parallel main planes thereof are (111) faces,
- (b) an aspect ratio thereof is 2 or more,
- (c) ten or more dislocation lines per grain are present, and
- (d) tabular silver halide grains each formed of silver iodobromide or silver chloroiodobromide whose silver chloride content is less than 10 mol%
- 8. The silver halide photographic lightsensitive material according to claim 2, wherein 50% or more of the total projected area of all the silver halide

15

5

10

20

grains contained in the lightsensitive layer is occupied by silver halide grains satisfying the following requirements (a), (d) and (e):

- (a) parallel main planes thereof are (111) faces,
- (d) tabular silver halide grains each formed of silver iodobromide or silver chloroiodobromide whose silver chloride content is less than 10 mol%, and
- (e) hexadonal tabular grains each having at least one epitaxial junction per grain at an apex portion and/or a side face portion and/or a main plane portion thereof
- The silver halide photographic lightsensitive 9. material acdording to claim 2, wherein 50% or more of the total projected area of all the silver halide grains contained in the lightsensitive layer is occupied by silver halide grains satisfying the following requirements (d), (f) and (g):
- (d) tabular silver halide grains each formed of silver iddobromide or silver chloroiodobromide whose silver chloride content is less than 10 mol%,
- (f) parallel main planes thereof are (100) faces, and
 - (g) an aspect ratio thereof is 2 or more
- The silver halide photographic lightsensitive material according to claim 2, wherein 50% or more of the total projected area of all the silver halide grains contained in the lightsensitive layer is

10

15

20

ī:j ļ-:

M

occupied by silver halide grains fatisfying the following requirements (g), (h) and (i):

- (g) an aspect ratio thereo # is 2 or more,
- (h) parallel main planes #hereof are (111) faces or (100) faces, and
- (i) tabular grains each /having a silver chloride content of at least 80 mol%
- The silver halide lightsensitive material according to claim 1, wherein the emulsified dispersion further contains a high-poiling organic solvent having a dielectric constant of 7.0 or less.
- The silver halide photographic lightsensitive material according to $\not\models$ laim 3, wherein 50% or more of the total projected area of all the silver halide grains contained in the lightsensitive layer is occupied by silver halide grains satisfying the following requirements (a) to (d):
 - (a) parallel main planes thereof are (111) faces,
 - (b) an aspect ratio thereof is 2 or more,
- (c) ten or more dislocation lines per grain are present, and
- (d) tabular silver halide grains each formed of silver iodobromide or silver chloroiodobromide whose silver chloride content is less than 10 mol%
- The silver halide photographic lightsensitive material according to claim 3, wherein 50% or more of the total projected area of all the silver halide

15

20

10

5

15

20

25

grains contained in the lightsensitive layer is occupied by silver halide grains satisfying the following requirements (a), (d) and (e):

- (a) parallel main planes the reof are (111) faces,
- (d) tabular silver halide grains each formed of silver iodobromide or silver chloroiodobromide whose silver chloride content is less than 10 mol%, and
- (e) hexagonal tabular grains each having at least one epitaxial junction per grain at an apex portion and/or a side face portion and/or a main plane portion thereof
- 14. The silver halide photographic lightsensitive material according to claim 3, wherein 50% or more of the total projected area of all the silver halide grains contained in the lightsensitive layer is occupied by silver halide grains satisfying the following requirements (d), (f) and (g):
- (d) tabular silver halide grains each formed of silver iodobromide or silver chloroiodobromide whose silver chloride content is less than 10 mol%,
- (f) paralled main planes thereof are (100) faces, and
 - (g) an aspect ratio thereof is 2 or more
- 15. The silver halide photographic lightsensitive material according to claim 3, wherein 50% or more of the total projected area of all the silver halide grains contained in the lightsensitive layer is

*)**

. He derive the state of the second of the s

M

5

10

15

20

25

occupied by silver halide grains satisfying the following requirements (g), (h) and (i):

- (g) an aspect ratio thereof is 2 or more,
- (h) paralled main planes thereof are (111) faces or (100) faces, and
- (i) tabular grains each having a silver chloride content of at least 80 mol%
- material comprising a support having thereon at least one lightsensitive silver halide emulsion layer, wherein the lightsensitive material contains at least one compound represented by general formula (I), and the silver halide emulsion layer contains a sensitizing dye and at least one compound represented by general formula (IV) in an amount of 1 to 50 mol% or less of the sensitizing dye:

$$(X) k-(L) m-(A-B) n$$
 (I)

wherein X represents an adsorbing group to silver halide or a light-absorbing group having at least one atom selected from the group consisting of N, S, P, Se and Te; L represents a bivalent linking group having at least one atom selected from the group consisting of C, N, S and O; A represents an electron-donating group; B represents a leaving group or a hydrogen atom, wherein after $-(A-B)_n$ portion is oxidized, B is eliminated or deprotonated thereby to form a radical $A \cdot ; k$ and m independently represent an integer of 0 to 3; and n

represents 1 or 2;

wherein Q represents an N or P atom; each of Ral, Ra2, Ra3 and Ra4 represents an alkyl group, an aryl group or a heterocyclic group, wherein two of Ral, Ra2, Ra3 and Ra4 may be bonded with each other to thereby form a saturated ring or three of Ral, Ra2, Ra3 and Ra4 may cooperate with each other to thereby form an unsaturated ring; and Y represents an anionic group, provided that Y does not exist in the event of an intramolecular salt.

- 17. The silver halide photographic lightsensitive material according to claim 4, wherein 50% or more of the total projected area of all the silver halide grains contained in the lightsensitive layer is occupied by silver halide grains satisfying the following requirements (a) to (d):
 - (a) parallel main planes thereof are (111) faces,
 - (b) an aspect ratio thereof is 2 or more,
- (c) ten or more dislocation lines per grain are present, and
- (d) tabular silver halide grains each formed of silver iodobromide or silver chloroiodobromide whose silver chloride content is less than 10 mol%
- 18. The silver halide photographic lightsensitive material according to claim 4, wherein 50% or more of

gering gering seeding till, gaven gering seeding species, and gaven seeding se

15

5

10

20

10

15

20

25

the total projected area of all the silver halide grains contained in the lightsensit ve layer is occupied by silver halide grains satisfying the following requirements (a), (d) and (e):

- (a) parallel main planes thereof are (111) faces,
- (d) tabular silver halide/grains each formed of silver iodobromide or silver thloroiodobromide whose silver chloride content is less than 10 mol%, and
- (e) hexagonal tabular/grains each having at least one epitaxial junction per grain at an apex portion and/or a side face porti/on and/or a main plane portion thereof
- The silver halide photographic lightsensitive material according to claim 4, wherein 50% or more of the total projected area of all the silver halide grains contained in the lightsensitive layer is occupied by silver halide grains satisfying the following requirements (d), (f) and (g):
 - (d) tabular silver halide grains each formed of silver iodobromide or silver chloroiodobromide whose silver chlori/de content is less than 10 mol%,
 - (f) parallel main planes thereof are (100) faces, and
 - (g) an aspect ratio thereof is 2 or more
 - 20. The silver halide photographic lightsensitive material according to claim 4, wherein 50% or more of the tota $\dot{1}$ projected area of all the silver halide

grains contained in the lightsensitive layer is occupied by silver halide grains satisfying the following requirements (g), (h) and (i):

- (g) an *spect ratio thereof is 2 or more,
- (h) parallel main planes thereof are (111) faces or (100) faces, and
- (i) tabular grains each having a silver chloride content of at least 80 mol%